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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,699	08/28/2003	Motohiro Sugiura	WEN-0021	6748

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EXAMINER

JOHNSON III, HENRY M

ART UNIT PAPER NUMBER

3739

DATE MAILED: 02/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,699

Applicant(s)

SUGIURA, MOTOHIRO

Examiner

Henry M Johnson, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Response to Arguments

Applicant's arguments filed 12/28/2004 have been fully considered but they are not persuasive. New matter has been added to the claims as cited herein.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, a third anterior-segment image is not disclosed nor is a second torsion-detection means. Paragraph two on page 28 of the disclosure alludes to additional images, but lacks specificity.

Claim 4 contains the new matter "input means".

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4-6 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,702,806 to Gray et al. Gray et al. teach an orientation system for corrective eye surgery using a first image taken in a first patient position and a second image taken with the

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patient in a second position wherein a feature is marked on the eye and used as an alignment point (abstract) for accommodating eye movement such as that known to occur as a patient is moved from an upright measuring position to the prone surgery position (Col. 1, lines 40-41). A pen is used to make two alignment marks on the eye. The eye is imaged with the patient in another position, and the image displayed. A computer is used to provide alignment with the marks on the eye (mark detection) and a reference reticle (col. 8, lines 5-15). Another software program calculates an oriental change (torsion detection) to be applied to a laser beam (Col. 8, lines 30-37).

Regarding claim 4, Gray et al. disclose the marks may be natural marks such as blood vessels (Col. 4, line 34) and the first image created using these natural marks. The surgeon selects one or more features in the eye, and these are then used for correlating between filtered images for the second (surgical) position of the eye with that of the first (measurement) position (Col. 5, lines 8-12), (using first image as the reference). An imaging device (Fig. 1, #13) is the input means.

Regarding claim 5, a graphical user interface is provided with a movable reticle for selecting and mapping between the images (Col. 5, lines 17-25).

Regarding claim 6, the display is inherently capable of outputting the image comparisons and calculation results.

Gray et al. teach eye tracking systems during a surgical procedure as being well known in the art (Col. 2, lines 4-13). These systems are known to use imaging to track the motion and therefore inherently provide detection and error generation means using multiple images.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,702,806 to Gray et al as applied to claim 1 above, and further in view of U.S. Patent 6,209,307 to Oltean et al. Gray et al. is discussed above and teaches reorienting the laser coordinates to accommodate the rotation and translation that takes place when moving the patient from a measurement position to the surgical position, but does not specifically disclose means for movement of the surgical beam. Oltean et al. disclose an eye tracking device for laser eye surgery wherein the eye tracking signals are used via an actuator control (Fig. 18, # 605) to control the rotation of a variable aperture (Fig. 18, # 557) and both "X" and "Y" movement via deflecting mirrors (Fig. 18, #s 582 and 584). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the means for rotating and translating the laser beam taught by Oltean et al. in the invention of Gray et al. as the signals for driving such means are provided by the Gray et al. device.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,702,806 to Gray et al as applied to claim 1 above, and further in view of U.S. Patent 5,752,950 to Frey et al. Gray et al. are discussed above, but do not teach inhibiting the laser radiation based on improper alignment. Frey et al. disclose a system for automatically inhibiting a laser based on detection of eye movement (alignment) beyond a threshold level (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to

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use the means for inhibiting a treatment laser due to improper positioning as taught by Frey et al. in the invention of Gray et al. to avoid an improper surgical ablation.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,666,857 to Smith teaches control of a laser with continuous image processing during the procedure that senses vertical and horizontal markings to produce correction signals control of the laser.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

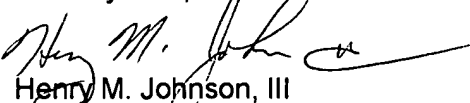
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

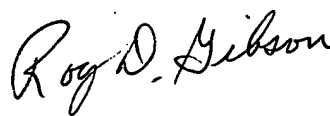
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Henry M. Johnson, III
Patent Examiner
Art Unit 3739


ROY D. GIBSON
PRIMARY EXAMINER